

February-22-13 11:00:58 AM

97773

Rev A 5/3/2023

~~PRELIMINARY ISSUE~~

NR2

[illegible]

Work Order ID 97773***97773***

Page 2

Item ID: D4686-1

Accept

N900040100Setup Start ***NS1***

Revision ID: PRELIM

Stop ***NS2***

Item Name: Spacer

Start Date: 2/22/13

Start Qty: 4.00

4

Cust Item ID:

Required Date: 3/15/13

Req'd Qty: 4.00

4

Customer:

Reference:

Approvals:

Process Plan: _____

Date: _____

Tooling: _____

Date: _____

Run Start ***NR1***

QC: _____

Date: _____

SPC (Y/N): _____

Date: _____

Stop ***NR2***Sequence ID/
Work Center IDOperation
DescriptionSet Up/
Run Hours

Tool ID

Tool #

Plan
CodeAccept
QtyReject
QtyReject
NumberInsp.
Stamp

122

Outsource process - Heat Treat

0.00

122

OutsourceI

Memo

0.00

Outsource process - Heat Treat

ISSUE P/O: _____
ENSURE C OF C IS ATTACH

124

Receive & Inspect for Damage & Mat'l Defects

0.00

124

Packaging

Memo

0.00

Packaging

ENSURE C OF C IS ATTACH

126

QC6- Inspect dimensions to drawing

0.00

126

QC

Memo

0.00

Quality Control

Work Order ID 97773***97773***

Page 3

February-22-13 11:00:58 AM

Item ID: D4686-1

Accept

N900040100Setup Start ***NS1***

Revision ID: PRELIM

Stop ***NS2***

Item Name: Spacer

Start Date: 2/22/13 Start Qty: 4.00

4

Cust Item ID:

Required Date: 3/15/13 Req'd Qty: 4.00

4

Customer:

Reference:

Approvals: Process Plan: _____ Date: _____ Tooling: _____ Date: _____

Run Start ***NR1***

QC: _____ Date: _____ SPC (Y/N): _____ Date: _____

Stop ***NR2***

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
130	Chemical Conversion Coat per QSI005 4.1	0.00							
130									
HandFinish	Memo	0.00							
Hand Finishing									
140	QC7-Inspect Chemical Conversion Coat	0.00							
140									
QC	Memo	0.00							
Quality Control									
150	Identify as per dwg & Stock Location: _____	0.00							
150									
Packaging	Memo	0.00							
Packaging	***STOCK IN SKIDTUBE CELL***								

13.03.13 @

5117 2X 8013-S-30

Work Order ID 97773

97773

Page 4

February-22-13 11:00:58 AM

Item ID: D4686-1 Accept ***N900040100*** Setup Start ***NS1***
 Revision ID: PRELIM Stop ***NS2***
 Item Name: Spacer
 Start Date: 2/22/13 Start Qty: 4.00 ***4*** Cust Item ID:
 Required Date: 3/15/13 Req'd Qty: 4.00 ***4*** Customer:
 Reference:

Approvals: Process Plan: _____ Date: _____ Tooling: _____ Date: _____ Run Start ***NR1***
 QC: _____ Date: _____ SPC (Y/N): _____ Date: _____ Stop ***NR2***

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
160	QC21- Final Inspection - Work Order Release	0.00							
160									
QC	Memo	0.00							
Quality Control									

Handwritten: Insp on a Rev A B-S-23

POSITIVE RECALL
 POSITIVE 1302.11 AUTH [Signature]
 DATED 8 DATE 13/5/13

Handwritten: to Rev A Dwg.

Handwritten: MF 13-6-11

Picklist Print

February-22-13 11:00:58 AM

Page 1

Work Order ID: 97773

Parent Item: D4686-1

Parent Item Name: Spacer

Start Date: 2/22/13

Required Date: 3/15/13

Start Qty: 4.00

Required Qty: 4.00

Comments: IPP REV:A 13.02.20 NEW ISSUE DD VERF:JLM

Component Item ID/ Item Name	Replacement Item ID	Mfg/ Purch	Bin Item	Primary Location	Last Location	Route Seq ID	Unit of Measure	Qty on Hand	Qty per Kit	Total Qty	Qty Issued	Date Issued	Status
M6061T6T0.750W.058 6061-T6 RD Tube .750 x.058W		Purchased	No			100	f	76.3170	0.304	1.28			

Location

MAT015

10099

112652

MJP
13/02/25

Loc Qty

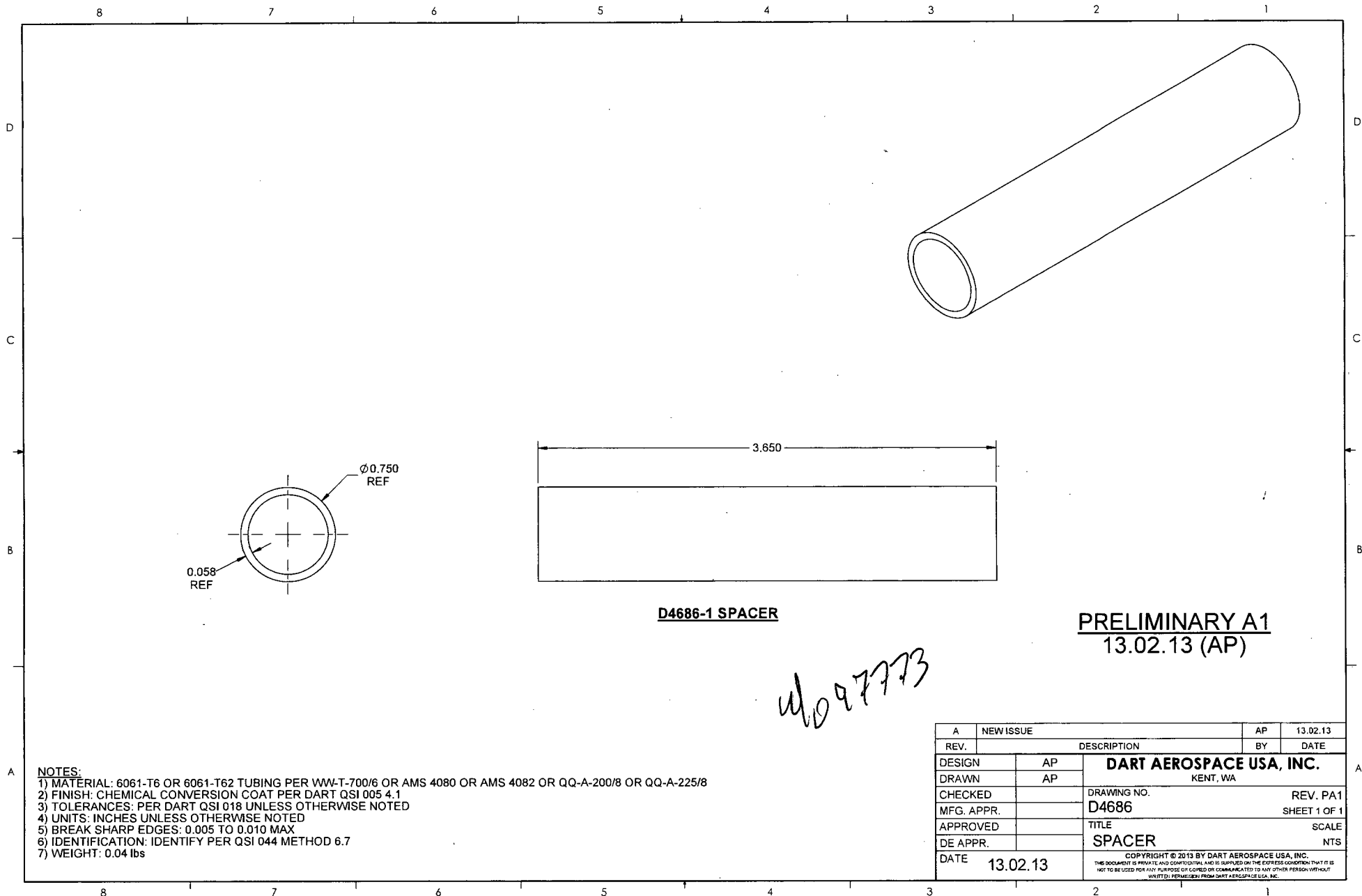
76.317

24

52.317

Loc Code

1,84



NOTES:

- 1) MATERIAL: 6061-T6 OR 6061-T62 TUBING PER WW-T-700/6 OR AMS 4080 OR AMS 4082 OR QQ-A-200/8 OR QQ-A-225/8
- 2) FINISH: CHEMICAL CONVERSION COAT PER DART QSI 005 4.1
- 3) TOLERANCES: PER DART QSI 018 UNLESS OTHERWISE NOTED
- 4) UNITS: INCHES UNLESS OTHERWISE NOTED
- 5) BREAK SHARP EDGES: 0.005 TO 0.010 MAX
- 6) IDENTIFICATION: IDENTIFY PER QSI 044 METHOD 6.7
- 7) WEIGHT: 0.04 lbs

D4686-1 SPACER

PRELIMINARY A1
13.02.13 (AP)

A	NEW ISSUE	AP	13.02.13
REV.	DESCRIPTION	BY	DATE
DESIGN	AP	DART AEROSPACE USA, INC. KENT, WA	
DRAWN	AP		
CHECKED		DRAWING NO.	REV. PA1
MFG. APPR.		D4686	SHEET 1 OF 1
APPROVED		TITLE	SCALE
DE APPR.		SPACER	NTS
DATE	13.02.13	<small>COPYRIGHT © 2013 BY DART AEROSPACE USA, INC. THIS DOCUMENT IS PRIVATE AND CONFIDENTIAL AND IS SUPPLIED ON THE EXPRESS CONDITION THAT IT IS NOT TO BE USED FOR ANY PURPOSE OR COPIED OR COMMUNICATED TO ANY OTHER PERSON WITHOUT WRITTEN PERMISSION FROM DART AEROSPACE USA, INC.</small>	

Linda Lacelle

From: David Duval
Sent: February-22-13 8:15 AM
To: Linda Lacelle
Subject: RE: EC 145 SKIDTUBE

Program/ rout and bom are made for D4753-1 douler:- good to make a w/o for 8
Route and bom are made for D4686-1 cross bolt spacer:- good to make a w/o for 4 made at T6 / and make one for T4
that need to get ship
To make the samples you need to make a custom w/o's (see below)

From: Linda Lacelle
Sent: Friday, February 22, 2013 8:08 AM
To: David Duval
Subject: RE: EC 145 SKIDTUBE

Did you make a route/bom?

From: David Duval
Sent: February-21-13 10:08 AM
To: Linda Lacelle
Cc: Jean-Luc Menard; Alex Pharand
Subject: RE: EC 145 SKIDTUBE

Could you make two custom w/o to fabricate the test samples with (4) T6 material and a other one with (4) T4 material.
The skidtube extrusion is (D2962)
Length of samples are cut at 3 inch.
Drill holes
Install (2) doubler (D4753-1)
Swage (1) crossbolt spacer (D4686-1) per dwg

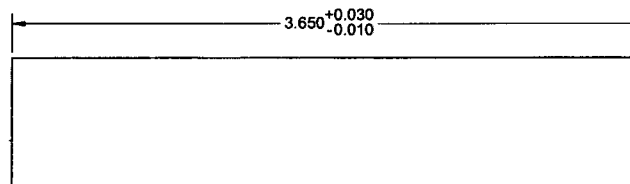
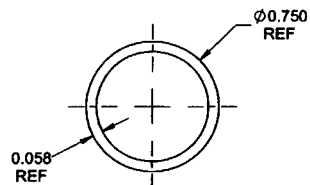
Thanks.

DAVID DUVAL
Production Engineering Coordinator

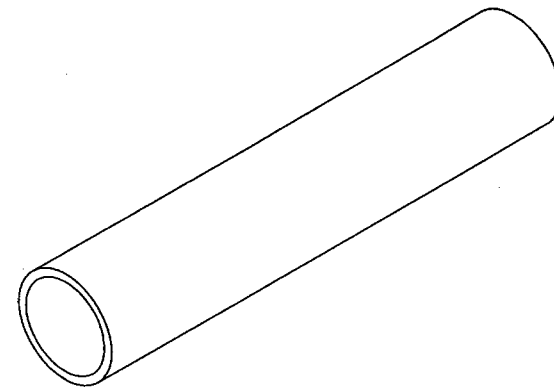
DART AEROSPACE
T 1 613 632-5200 > 234
F 1 613 632-5246
1 800 556- 4166
www.dartaerospace.com



Please consider your environmental responsibility before printing this e-mail



D4686-1 SPACER



NOTES:

- 1) MATERIAL: 6061-T4/-T42 SEAMLESS ALUMINUM TUBING $\phi 0.750 \times 0.058$ WALL PER WW-T-700/6, AMS 4081 OR ASTM B210 (REF. DART SPEC M6061T4T0.750W.058) OR 6061-T6/-T62 ALUMINUM TUBING PER WW-T-700/6, AMS 4080 / 4082, OR ASTM B210 (REF DART SPEC M6061T6T0.750W.058) HEAT TREAT TO -T4/-T42 CONDITION. MIN UTS = 30 KSI (60 HREW MIN)
- 2) FINISH: CHEMICAL CONVERSION COAT PER DART QSI 005 4.1
- 3) TOLERANCES: PER DART QSI 018 UNLESS OTHERWISE NOTED
- 4) UNITS: INCHES UNLESS OTHERWISE NOTED
- 5) BREAK SHARP EDGES: 0.005 TO 0.010 MAX
- 6) IDENTIFICATION: IDENTIFY PER QSI 044 METHOD 6.7
- 7) WEIGHT: 0.04 lbs

A		NEW ISSUE		AP	13.02.13
REV.	DESCRIPTION			BY	DATE
DESIGN	AP	DART AEROSPACE USA, INC. KENT, WA			
DRAWN	AP				
CHECKED	<i>AP</i>	DRAWING NO.	REV. A		
MFG. APPR.	<i>AP</i>	D4686	SHEET 1 OF 1		
APPROVED	<i>AP</i>	TITLE	SCALE		
DE APPR.	<i>AP</i>	SPACER	NTS		
DATE	13.02.13	<small> COPYRIGHT © 2013 BY DART AEROSPACE USA, INC. THIS DOCUMENT IS PRIVATE AND CONFIDENTIAL AND IS SUPPLIED ON THE EXPRESS CONDITION THAT IT IS NOT TO BE USED FOR ANY PURPOSE OR COPIED OR DISSEMINATED TO ANY OTHER PERSON WITHOUT WRITTEN PERMISSION FROM DART AEROSPACE USA, INC. </small>			

RELEASED
2013-03-25